Proposal Full View

Print

Applicant Information

Organization Name

Joshua Basin Water District • *

Tax ID

952387111

Proposal Name

JBWD - Water Recharge

Monitoring Well

The objectives of the proposal are to: 1) track the movement of recharge water within the Joshua Tree groundwater basin to optimize pumping and ameliorate overdraft conditions; 2) monitor groundwater recharge impact on nitrate concentrations; and 3) expand the region's overall understanding of water recharge and movement for optimized groundwater management. The basic concern is that rising water levels resulting from AR entraining nitrates (anthropogenic occurrence from septic tank effluent) stored in the unsaturated zone. The source of the nitrates is septic-tank effluent. The USGS has already installed an unsaturated-zone monitoring site at the proposed recharge site. The Water Recharge Monitoring Well Project will allow USGS and the District to monitor the flow of water to the water table and to monitor any water-quality changes. In addition to UZ instrumentation USGS installed one well at the water table which will allow then to monitor water levels and water quality on site. The District's Water Recharge Monitoring Well Project provides a critical component to the District's plans as articulated in the 1996 GWMP to manage declining groundwater quality and quantity in its Copper Mountain and Joshua Tree groundwater basins. *

Proposal Objective

Budget

Other Contribution

Local Contribution

Federal Contribution

Inkind Contribution

Amount Requested

Total Project Cost

\$0.00	
\$0.00	
\$0.00	
\$0.00	
\$250,000.00	:

Geographic Information

Latitude *

 $DD(+/-)^{33} \qquad MM^{49} \qquad SS^{59}$

\$250,000.00

Longitude *

DD(+/-) 118 MM 0 SS 0

This is the Longitude/Latitude centerpoint Of the

project

County San Bernardino *
Ground Water Basin Joshua Tree
Hydrologic Region Colorado River

Watershed Mojave

Legislative Information

Assembly District 65th Assembly District *
Senate District 18th Senate District *
US Congressional District District 41 (CA) *

Project Information

Project Name JBWD - Water Recharge Mc

Implementing Organization	Joshua Basin Water District
Secondary Implementing Organization	N/A
Proposed Start Date	4/1/2013
Proposed End Date	2/7/2014
Project Scope	The project entails the design and construction of of an approximately 1,000-foot deep monitoring well.
Project Description	The Water Recharge Monitoring Well Project directly synergizes the District's Water Recharge Facility Project (partially funded with Prop 84 IRWM funds) and is recommended by the USGS. The basic concern is that rising water levels resulting from AR entraining nitrates (anthropogenic occurrence from septic tank effluent) stored in the unsaturated zone of the Joshua Tree (JT) Groundwater Basin. The Water Recharge Monitoring Well will be located downgradient from the water recharge site and will be approximately 1,000-feet deep with a minimum of three and up to five piezometers with pressure transducers installed in each. In addition to depth-dependent water levels, depth-dependent water-quality data will also be collected. The idea is that the monitoring well will be an early warning system to help prevent a high-nitrate event from occurring in the JT basin. The transducers record water-level data at 1-4 hour intervals and these

Location

	data are downloaded every 6-8 weeks. USGA will also collect water-quality data (stable isotopes, nutrients, DOC, major and minor ions) from each piezometer. Prior to recharge starts which will occur upon completion of the Water Recharge Facility project, USGA will collect data 2-3 times and once the recharge begins, USGS will collect data quarterly. The water-level and water-quality data from the new site will be in addition to data collected from the existing well at the recharge site (JTUZ-4).
Project Objective	The monitoring well is needed to: 1) track the movement of recharge water within the Joshua Tree groundwater basin to optimize pumping and ameliorate overdraft conditions; 2) monitor groundwater recharge impact on nitrate concentrations; and 3) expand the region's overall understanding of water recharge and movement for optimized groundwater management.

Project Benefits Information

Project Benefit Type		Measurement	Description
Primary	Groundwater Management- Monitoring wells installed	0	Water Recharge; The transducers on the well will record water- level data at 1- 4 hour intervals and these data are downloaded every 6-8 weeks
Primary	Groundwater Management- Groundwater quality samples takened	0	The basic concern is the rising water levels resulting from AR entraining nitrates (anthropogenic occurrence from septic tank effluent)

stored in the unsaturated zone of the Joshua Tree Basin.	
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Project Objective

Budget

Other Contribution	0	
Local Contribution	0	
Federal Contribution	0	
Inkind Contribution	0	
Amount Requested	250000	
Total Project Cost	250000	

Geographic Information

Latitude DD(+/-)		33	MM 49	SS 59	
Longitude DD(+/-)		118	MM 0	SS 0	
Longitude/Latitude Clarification	This is the centerp		Location		
County San Bernardin	o Ground Water Basin	Joshua Tre	e Hydrologic Re	egion Colorado R	iver WaterShed
Mojave					

Legislative Information

Assembly District	65th Assembly District
Senate District	18th Senate District
US Congressional District	District 41 (CA)

Section: Applicant Information and Question's Tab

APPLICANT INFORMATION AND QUESTION'S TAB

Q1. Applicant Information

Provide the agency name, address, city, state, and zip code of the applicant submitting the application.

Joshua Basin Water District, P.O. Box 675, Joshua Tree, CA 92252

Q2. Proposal Description:

Provide a brief abstract of the Proposal. This abstract must provide an overview of the proposal including the main issues and priorities addressed in the proposal. Within the abstract, please describe how the proposal relates to the GWMP's BMO's.

The Joshua Tree and Copper Mountain Grounwater Basins are in a state of overdraft. The District's Water Recharge Monitoring Well Project is for the design and construction of an approximately 1,000-foot deep monitoring well with 3-5 piezometers and other instrumentation. The monitoring well is needed to: 1) track the movement of recharge water within the Joshua Tree groundwater basin to optimize pumping and ameliorate overdraft conditions; 2) monitor groundwater recharge impact on nitrate concentrations; and 3) expand the region's overall understanding of water recharge and movement for optimized groundwater management. The Water Recharge Monitoring Well Project directly synergizes the District's Water Recharge Facility Project (partially funded with Prop 84) IRWM funds and presently out to bid). The Water Recharge Monitoring Well Project will allow the JBWD to avail itself of an annual volume of 1,959 afy of SWP water until 2022 into a 30-acre recharge site. This project will provide for groundwater recharge and dissipation of nitrate issues in the overdrafted and impaired basins. One of the basic concerns to be addressed by the proposed project is the rising water levels resulting from AR entraining nitrates (anthropogenic occurrence from septic tank effluent) stored in the unsaturated zone of the Joshua Tree Basin. The source of the nitrates is septic-tank effluent. The USGS has already installed an unsaturated-zone monitoring site at the proposed recharge site. The Water Recharge Monitoring Well Project will allow USGS and the District to monitor the flow of water to the water table and to monitor any water-quality changes. In addition to UZ instrumentation USGS installed one well at the water table which will allow then to monitor water levels and water quality on site. The monitoring site will have 3-5 piezometers, each with a pressure transducer. In addition to depth-dependent water levels, depth-dependent water-quality data will also be collected. The idea is that the monitoring well will be an early warning system to help prevent a high-nitrate event from occurring in the Joshua Basin Groundwater Basin. The overall objective of the District's 1996 GWMP is to protect groundwater quality and quantity and from degradation resulting from excessive groundwater production and/or groundwater contamination, and to limit or eliminate groundwater overdraft. The proposed project directly addresses these subelements of the District's overall objective by providing a monitoring mechanism to determine if groundwater contamination/degradation is occurring and to monitor the overall recharge success and water quality. Groundwater Monitoring is identified in the District's GWMP as BMO as is Recharge Area Protection. Since this project directly monitors the District's most ambitious and likely the most effective Recharge Area, this protect squarely addresses and supports this Objective. The proposed project will provide accurate and insightful data and information to the District and USGS which will also the District to best implement and succuessfully attain the objectives outlined it its GWMP.

Q3. Project Director:

Provide the name and details (including email) of the person responsible for executing the grant agreement for the applicant. Persons that are subcontractors to be paid by the grant cannot be listed as the Project Director.

Joe Guzzetta, General Manager, joeg@jbwd.com, (760) 366-2042 ext 226

Q4. Project Manager:

Provide the name and contact information (including email) of the Project Manager from the applicant agency or organization that will be the day-to-day contact on this application.

Joshua Basin Water District, joeg@jbwd.com, (760) 366-2042 ext 226

Q5. Additional Information:

Based on the region's location, what is the applicable DWR region office (Northern, North Central, South Central, or Southern)? The following link can be used to view each DWR region office boundaries:

http://www.water.ca.gov/groundwater/groundwater basics/gw contacts info.cfm

- 1) Northern Region
- 2) North Central Region
- 3) South Central Region
 - 4) Southern Region

Q6. Additional Information:

Provide the Date of GWMP Adoption, if any, and list the pursuant Water Code Section or other legal Authority in which it was adopted.

JBWD's 1996 GWMP, adopted on February 17, 1997 by Ordinance 97-1, serves as the GWMP for JBWD. It contains all the relevant components related to Groundwater Management Plans in California Water Code Sections 10750-10753.10., as well as the components recommended by the California Department of Water Resources (DWR) in California's Groundwater, Bulletin 118.

Q7. Additional Information:

Provide a list of documents that support and indicate collaboration with other local public agencies with regard to the management of the affected groundwater basin (e.g., MOUs, MOAs, JPAs, adoption of a GWMP, recognition of county ordinances in permitting processes, or party to a groundwater basin adjudication order).

JBWD's 1996 GWMP, adopted on February 17, 1997, by Ordinance 97-1, serves as the GWMP for JBWD. It contains all the relevant components related to Groundwater Management Plans in California Water Code Sections 10750-10753.10., as well as the components recommended by the California Department of Water Resources (DWR) in California's Groundwater, Bulletin 118.

Q8. Additional Information

Name the entity(ies) providing the fund(s) reported in the above Budget section under the category "Other Contribution". If there are no "Other Contributions" Please answer this question with, "No Other Contributions".

No Other Contributions

Q9. Eligibility:

List the urban water suppliers that will receive funding from the proposed grant. Please provide the agency name, a contact phone number and email address. Those listed must submit self certification of compliance with CWC §525 et seq. and AB1420, see Attachment 10. If there are none, so indicate.

Joshua Basin Water District. P.O. Box 675, Joshua Tree, CA 92252; Joe Guzzetta, General Manager,

joeg@jbwd.com, (760) 366-2042 ext 226

Q10. Eligibility:

Have all of the urban water suppliers, listed in Q9 above, submitted complete 2010 UWMP to DWR? If not, explain why. Have those plans been verified as complete by DWR? If not, explain current status.

Yes

Q11. Completeness Check:

Have all of the fields in the application been completed?

Yes

Q.11. Completeness Check (cont)

If no, please explain. If yes, answer this question with "NA".

NA

Section: Application Attachments Tab

APPLICATION ATTACHMENTS TAB

Attachment 1. Authorizing Documentation

Upload authorizing documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att1 LGA12 JBWD AuthDoc 1of1.pdf

Attachment 2. Eligible Applicant Documentation

Upload eligible documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att2 LGA12 JBWD EligDoc 1of1.pdf

Attachment 3. Status of GWMP

Upload the GWMP documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att3 LGA12 JBWD GWMP 1of1.pdf

Attachment 4. Project Description

Upload project description here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att4 LGA12 JBWD ProjD 1of1.pdf

Attachment 5. Work Plan

Upload work plan here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att5 LGA12 JBWD WrkPln 1of1.pdf

Attachment 6. Budget

Upload budget here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att6_LGA12_JBWD_BUDGET_1of1.pdf

Attachment 7. Schedule

Upload schedule here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att7 LGA12 JBWD SCHED 1of1.pdf

Attachment 8. Quality Assurance

Upload quality assurance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att8_LGA12_JBWD_QA_1of1.pdf

Attachemnt 9. Past Performance

Upload past performance documentation here. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att9 LGA12 JBWD PERFORM 1of1.pdf

Attachment 10. AB1420 and Water Meter Implementation Compliance

Upload 1420 and water meter implementation documentation here, if applicable. Ensure file name is consistent with the LGA Grant PSP, Section II. "How to Submit An Application".

Last Uploaded Attachments: Att10 LGA12 JBWD 1420 1of1.pdf